



**National Park Service Fire Ecology Program**  
***DRAFT* Strategic Plan**  
**March 2004**

Approved by the National Park Service Fire Management Leadership Board, XX/XX/2004

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Sue Vap  
National Park Service  
Fire Management Officer

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Date

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# 1 Introduction

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## A. Purpose

The National Park Service's (NPS) Fire Management Program has grown immensely in scope and complexity over the last decade. Changes in federal policy, new political initiatives, and increased planning requirements, have all resulted in a greater need for scientific information to support fire management activities. In recognition of this need, the NPS made the commitment to fund national and regional fire ecologists and additional field-level fire ecologist positions, within the existing budgetary allocation. These positions were designed to address the increased workload associated with:

- collecting, analyzing, and interpreting fire effects monitoring data
- using fire ecology information for adaptive management
- serving as a liaison between fire and resource management at park, regional and national levels
- providing assistance in the development of land management plans (Fire Management Plans and associated compliance documents, Resource Management Plans)
- conducting landscape-level assessments to assist in the evaluation and prioritization of fire management needs and goals
- providing direction for project-level prescribed fire and fuels treatment plans
- collaborating with other government agencies and partners.

Like any developing program, the NPS Fire Ecology Program was faced with much work to do without a historical framework to organize and guide the program. Although work areas had been identified, the Fire Ecology Program needed a plan to define an overall program vision and mission and to clearly identify and prioritize the work of the program. With a high demand for information and assistance, as well as budgetary constraints, the Fire Ecology Program needed a way to determine where best to focus its efforts to carry out the most important work to support the NPS in a timely, effective way. For further program background leading to this Strategic Plan, see Appendix A. The Strategic Plan organizes the work of the Fire Ecology Program in a comprehensive, logical manner to:

- define the scope of the program
- establish a shared vision
- identify guiding principles
- establish goals and objectives to drive the program
- outline strategies for achieving the objectives
- develop action plans for accomplishing the strategies.

Over the course of this Strategic Plan's development, the Fire Management Program Center also developed a Strategic Plan for the Wildland Fire Management Program using a similar process. As part of the Wildland Fire Management Program, the Fire Ecology Program Strategic Plan is consistent with, and appended to, the Wildland Fire Management Program Strategic Plan.

The strategic plan hierarchy is as follows:



While this plan reflects the specific mission of, and provides detailed direction to, the NPS Fire Ecology Program, it falls under the broader umbrella of the NPS Wildland Fire Management Program and NPS Strategic Plans. The more specific objectives, strategies, and action items of the Fire Ecology Program Strategic Plan can be viewed as an implementation plan, or work plan that flows from the more general NPS and Wildland Fire Management Program Strategic Plans.

### B. Strategic Plan Development Process

Three separate workshops were held to develop the Fire Ecology Program Strategic Plan, 10-11 October 2001 (Ft. Collins, CO), 12-14 February 2002 (Ft. Collins, CO), and 7-10 April 2003 (Reno, NV). A core group of participants were present at all three workshops while other participants were involved in one or two workshops (Appendix B). The workshops were facilitated by Wilma Strohmeier of InterWest Management Associates, Inc.

The Strategic Plan development process involved several steps. Because considerable time passed between workshops, some steps were repeated to get input from new workshop participants or because conditions had changed since the previous workshop. The following description represents the general process that was used to develop the Strategic Plan, but the steps did not necessarily take place in a chronological fashion:

**Situation Analysis** – We first performed an internal evaluation of the program’s current strengths and weaknesses and future opportunities and threats. This exercise was designed to provide a foundation to make sure the group addressed the limitations of the program and took advantage of the program assets in developing the Strategic Plan.

**Guiding Principles** – The group developed a list of the program’s core values to describe a sound set of beliefs, not to be compromised, on which all policies and actions are based. A long list was developed and then each participant ranked their top choices to select the final list (section 4).

**Vision** – We created a vivid description of what the Fire Ecology Program should look like; this vision was redrafted in many forms before a consensus was finally reached (section 2).

**Mission Statement** – To provide long-term direction and focus, we wrote a clear and compelling statement that defines the Fire Ecology Program. This statement concisely identifies who we are and what we want to accomplish (section 3).

**Mission Goals** – The group determined the most important future achievements for the Fire Ecology Program by describing general statements about what must be accomplished to achieve the mission. These long-term mission goals provide the basis for evaluating performance, and transition from the mission statement to specific objectives that must be accomplished (section 5).

**Objectives** – Next, we formulated specific, measurable, time bound results that will lead to the accomplishment of a mission goal. These objectives restate mission goals in operational terms of what must be done and when it must be done (section 5). Note that the term “Objective” used here is identical to the term “Long-Term Goal” often used in other plans.

**Strategies** – We prepared broad, action-oriented strategies that describe how resources will be used and how results identified in each objective will be achieved (sections 5).

**Long-term Action Plan** – Lastly, a detailed plan with action items, timeframes, and assignment of responsibility was compiled. In order to meet the objectives, specific actions must be taken to carry out the strategies. The Action Plan details actions to be performed, who is responsible for completing the task, and when the task must be completed to meet targets (section 6).

**Annual Action Plan** – Because it is unlikely that resources exist to achieve all the program goals immediately, each year an annual action plan will be created with selected action items that will allow the Fire Ecology Program to meet its highest priority goals for the next year.

The fact that the Strategic Plan development process took place over an extended period of time was a significant barrier to an efficient, cohesive process. Despite this obstacle of discontinuity, the workshop participants put a great deal of effort into making sure that the resulting product would be a useful, working document for the Fire Ecology Program. After the workshops were completed, a smaller subset of the group was formed to edit and reorganize the plan. The goals and objectives were then finalized and the strategies and action items were prioritized with the larger group during the annual Fire Ecology Program Steering Committee meeting and the monthly National and Regional Fire Ecology Program Manager conference calls. Finally, a project lead was assigned to document the process, compile and format all the work, implement the review process, and finalize the Strategic Plan for approval by the Fire Management Leadership Board.

Because the development of this Strategic Plan occurred simultaneous to development of the Wildland Fire Management Program Strategic Plan, efforts were made to ensure that the planning efforts were integrated. The Fire Ecology Program Mission Goals link directly to the Mission Goals outlined in the Wildland Fire Management Program Strategic Plan referenced in section 5 of this plan.

### C. Strategic Plan Management Process

This Strategic Plan is designed to provide programmatic direction by clearly articulating the NPS Fire Ecology Program’s mission and linking that mission to long-term goals, objectives, and more specific strategies. An annual Fire Ecology Program Action Plan will be developed each year to outline the highest priority strategies that will assist in fulfilling the program’s mission goals within current budgetary allocations.

The Strategic Plan was designed to fully support field-level goals and is consistent with work currently being performed at both the field and regional levels. The Fire Ecology Program staff will work directly with their Regional and Park Fire Management Officers and Resources Management Chiefs to determine how the tasks outlined in the annual Action Plan link with their work plans. While park- and regional-level needs are the highest priority, the Strategic Plan will provide long-term direction that will assist Parks and Regions in achieving their goals while simultaneously carrying out the broader mission of the Fire Ecology Program.

## **NPS Fire Ecology Program Strategic Plan**

The NPS Fire Ecology Strategic Plan will be reviewed each year by the Fire Ecology Program Steering Committee at its annual meeting in October. This review will be an opportunity to examine the mission goals, objectives, strategies, and action items to determine whether they are still relevant to achieving the mission of the Fire Ecology Program. In addition, new strategies or tasks may be added in response to changing needs of the NPS Fire Management Program. Also at this annual meeting, the strategies and action items that are the highest priority to accomplish in order to meet the goals of the program will be compiled into a new annual Action Plan. Progress on completing the annual Action Plan will be checked quarterly during the Fire Ecology Steering Committee conference calls (January, April, and July).

The approved NPS Fire Ecology Strategic Plan and current and past Action Plans will be posted on the Internet at: **<http://www.nps.gov/fire/ecology/>**

## 2 Vision

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*The National Park Service Fire Ecology program ensures that the most current science-based information is integrated into fire and land management goals, decisions and practices. Cooperative efforts help protect, restore, and maintain diverse landscapes where the role of fire is understood and accepted as a fundamental cultural and ecological force.*



photo by Eric Knapp

## 3 Mission Statement

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*The mission of the National Park Service Fire Ecology Program is to apply fire ecology to guide fire and land management:*

- *Supporting land management decisions and practices with science-based expertise*
- *Providing leadership and innovation in the fire ecology community*
- *Articulating ecologically sound objectives to strengthen and facilitate the land management planning process*
- *Promoting a widely communicated and easily accessible knowledge base*
- *Facilitating coordination between wildland fire and other resource management programs.*

## 4 Guiding Principles

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The following Guiding Principles define the Fire Ecology Program's essential and enduring tenets, not to be compromised. All Fire Ecology Program policies and actions are based on this sound set of core values.

- **Best Available Science and Judgment**  
*Base recommendations and decisions on the best available science, including sound data collection, analysis, and interpretation.*
- **Excellent Resource Stewardship**  
*Seek and promote best resource management practices to restore and maintain fire influenced landscapes.*
- **Interdisciplinary Approach**  
*Integrate fire and fuels management into natural and cultural resource programs.*
- **Support Individual Parks**  
*Support individual parks within the context of the broader ecological and cultural landscape-scale issues.*
- **Visionary Approach**  
*Anticipate evolving needs and develop visionary solutions.*
- **Innovation**  
*Foster an atmosphere that encourages innovative solutions.*
- **Professional Workforce**  
*Cultivate and value a professional, competent and ethical workforce.*
- **Communications**  
*Ensure common understanding, acceptance, and support of the fire ecology program through open, timely, and pertinent communication with all stakeholders.*
- **Data Stewardship**  
*Manage data as a resource that is reliable, timely, and accessible for adaptive management.*
- **Leadership**  
*Provide passionate (strong) advocacy at all levels for ecologically sound fire management.*
- **Safety**  
*Recognize safety as a primary consideration for all actions, recommendations, and decisions.*



## 5 Mission Goals, Objectives, and Strategies

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To achieve the mission of the Fire Ecology Program, mission goals, objectives, and strategies were developed, keeping the program vision and guiding principles in mind. The Fire Ecology Program mission goals, objectives, and strategies are preceded by the corresponding Wildland Fire Management Program (WFMP) Strategic Plan mission goals to illustrate the direct tie between the tiered planning efforts.

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*~WFMP MISSION GOALS 4A AND 4B: Fire Management develops improved management practices, systems, and technologies to accomplish its mission; NPS fire management programs are cost effective and efficient~*

### **Mission Goal I. Fire Ecology Program Structure and Function – Integrate the Fire Ecology Program with the larger fire management community by clearly defining the Fire Ecology Program structure and function.**

**Objective Ia.** The role and organizational structure of the Fire Ecology Program is well-defined, understood, and recognized within the National Park Service (NPS) Fire Management Program by 2006.

**Strategy Ia1.** Develop organization and functional charts for the Fire Ecology Program and other relevant positions (e.g. Fire Management Officers (FMO), Prescribed Fire Specialists) and establish relationships of program specialists with the Regional and National office staffs.

**Strategy Ia2.** Define the roles and responsibilities of the Fire Ecology Program staff.

**Strategy Ia3.** Define roles and responsibilities of the Fire Ecology Program staff in relation to other NPS fire management staff.

**Strategy Ia4.** Refine NPS Fire Monitoring Policy and specify the roles of Fire Ecology Program staff in policy implementation.

**Objective Ib.** The NPS Fire Ecology Program is well-integrated with the NPS Fire Management Program by 2006.

**Strategy Ib1.** Integrate the Fire Ecology Program and the NPS Fuels Management Program.

**Strategy Ib2.** Establish a relationship between the Fire Ecology Program and the NPS fire management safety program.

**Strategy Ib3.** Integrate the Fire Ecology Program into the NPS fire evaluation and review process.

**Strategy Ib4.** Establish the relationship between the Fire Ecology Program and the NPS Fire Prevention and Education Program.

**Strategy Ib5.** Establish the relationship between the Fire Ecology Program and the NPS fire management Air Quality Program.

**Strategy Ib6.** Establish the relationship between the Fire Ecology Program and the NPS Fire Use and Suppression Programs.

**Strategy Ib7.** Establish fire ecologists as one of the fire program contacts for Burned Area Emergency Rehabilitation (BAER).

**Strategy Ib8.** Establish fire ecologists as one of the fire program contacts for the Resource Advisor (READ) function.

**Objective Ic.** The success of the Fire Ecology Program in achieving its mission is assured through program evaluation, beginning in 2003.

**Strategy Ic1.** Conduct periodic reviews of NPS Fire Ecology Programs

**Strategy Ic2.** Evaluate progress on Strategic Plan implementation on a quarterly basis.

**Strategy Ic3.** Evaluate the Fire Ecology Program structure and position needs.

**Objective Id.** The NPS Fire Ecology Program Strategic Plan is well-integrated with other strategic planning efforts by 2004.

**Strategy Id1.** The Fire Ecology Program Strategic Plan is integrated into the NPS Wildland Fire Management Strategic Plan and links to the NPS Strategic Plan.

**Objective Ie.** The role of the Fire Ecology Program in relation to the broader external and interagency fire management community is well defined and recognized by 2008.

**Strategy Ie1.** Define external users of fire ecology information.

**Strategy Ie2.** Develop new Memorandum of Understandings (MOUs) and/or formalize relationships with identified partners that specify roles and responsibilities.

**Strategy Ie3.** Identify and participate with appropriate interagency task groups as necessary to establish and maintain collaborative relationships with the broader fire management community.

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*~WFMP MISSION GOALS 1A AND 3A: Natural and cultural resources and their associated values are protected, restored, and maintained in good condition, managed within their broader ecosystem and cultural context. Management actions will not compromise safety for employees and the public; Natural and cultural resources are preserved through formal partnership programs (including interagency fire planning)~*

**Mission Goal II. Science-based Management – Ensure fire management activities are informed and supported by the best available scientific information.**

**Objective Iia.** Field-level planning, reporting, and monitoring activities are developed and reviewed to ensure that they are science based by 2006.

**Strategy Iia1.** Develop recommended guidelines and procedures for review of policy, Fire Management and Monitoring Plans, research proposals, and reports.

**Strategy Iia2.** Develop, implement and review monitoring methods and protocols that effectively measure progress towards fire and resource management goals.

**Objective Iib.** Knowledge gained through Fire Ecology Program activities is consistently analyzed, evaluated, and made available for program planning and refinement by 2005.

**Strategy Iib1.** Develop a structured reporting process for monitoring program data analysis and results that reports accomplishments to Park Superintendents, Regional Fire Management Officers, the Fire Management Leadership Board, and the public.

**Strategy Iib2.** Develop a process to incorporate research results into fire management program planning and implementation.

**Objective Iic.** Landscape-level planning incorporating ecological modeling, desired future conditions, risk assessment, and treatment priority concepts is implemented by 2006.

**Strategy Iic1.** Work with NPS and interagency partners to develop and implement landscape-scale planning efforts, including LANDFIRE, the Fire Program Analysis (FPA) system, and the Fire Learning Network (FLN) program.

**Strategy Iic2.** Utilize a consistent/relevant process to document Fire Regime Condition Class (FRCC) and integrate FRCC assessments into ecological models and other planning efforts.

**Objective Iid.** A process for identifying, prioritizing, and pursuing Fire Ecology Program research needs is implemented by 2006.

**Strategy Iid1.** Identify National Fire Ecology Program roles, mechanisms, and schedules for identifying, prioritizing, and pursuing programmatic research needs.

**Strategy Iid2.** Identify regional and Park level Fire Ecology Program roles, mechanisms, and schedules for identifying, prioritizing, and pursuing programmatic research needs.

*~ WFMP MISSION GOAL 4A: Fire Management develops improved management practices, systems, and technologies to accomplish its mission~*

**Mission Goal III. Information Management – Provide fire ecology-related data and information that is easily accessible and valuable to all user groups.**

**Objective IIIa.** Data needs for the Fire Ecology Program are identified, prioritized, and pursued by 2006.

**Strategy IIIa1.** Identify, prioritize, and acquire data required to support the Fire Ecology Program.

**Strategy IIIa2.** Establish the relationship between the Fire Ecology Program and the NPS fire information management program.

**Objective IIIb.** Fire ecology data and information are collected, stored, and accessed using the latest technologies for use by the Fire Ecology and other related programs and projects by 2005..

**Strategy IIIb1.** Design and build an application to collect, store, index, and analyze fire ecology data and information.

**Strategy IIIb2.** Centralize data and information as appropriate to provide secure access.

**Strategy IIIb3.** Develop and implement standards and quality assurance/quality control (QA/QC) measures to ensure consistent, high quality data and information.

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*~ WFMP MISSION GOAL 1B: Fire management is integrated with other service wide programs to contribute knowledge about natural and cultural resources and associated values; management decisions about resources and visitors are based on adequate scholarly and scientific information~*

**Mission Goal IV. Integrate Fire and Resource Management – Facilitate coordination between the fire and resource management programs to ensure that the fire program meets resource management goals.**

**Objective IVa.** Fire and resource management staff will work together to ensure that fire-related resource management objectives are integrated in all levels of park planning by 2007 (General Management Plan (GMP), Resource Management Plan (RMP), Fire Management Plan (FMP), project-level plan); develop policy, guidance and new initiatives for fire-related land management planning and related issues.

**Strategy IVa1.** Establish the role of the Fire Ecology Program in the fire and resource management planning process.

**Strategy IVa2.** Establish NPS administrative processes that encourage collaboration between the Fire Ecology Program and natural and cultural resource planning efforts.

**Strategy IVa3.** Educate and train fire and resource staff on appropriate collaborative issues including planning, FRCC, and ecological modeling, working with other fire management program staff.

**Objective IVb.** The Fire Ecology Program will collaborate with the Inventory and Monitoring (I&M) program (branch of the NPS Natural Resource Program Center) by 2006 to efficiently meet resource-monitoring goals.

**Strategy IVb1.** Continue to implement collaborative vegetation/fuels mapping program with the NPS I&M program.

**Strategy IVb2.** Integrate the Fire Ecology Program and I&M network inventory and monitoring efforts.

**Strategy IVb3.** Participate with appropriate task groups to ensure collaboration occurs between fire ecology and I&M programs and staff.

*~ WFMP MISSION GOAL 4C: Adopt leadership and management practices that promote a competent, motivated, diverse workforce~*

**Mission Goal V. Employee Development and Retention – Promote a work environment where employees are highly skilled and valued.**

**Objective Va.** The Fire Ecology Program recruits and maintains a professional and highly competent work force by 2006.

**Strategy Va1.** Institute recruitment plan for filling vacant fire ecologist and fire effects monitor positions to recruit employees with high potential.

**Strategy Va2.** Develop standard position descriptions (PDs) for all levels of the Fire Ecology Program. Include additional optional PDs that incorporate 6c coverage (secondary firefighter retirement) for Fire Ecology Program positions where appropriate.

**Strategy Va3.** Develop and implement minimum competencies and professional standards for all permanent Fire Ecology Program employees, including scientific and program administration skills.

**Strategy Va4.** Implement process for tracking retention of employees.

**Objective Vb.** The Fire Ecology Program develops highly skilled, dedicated, and motivated employees who are leaders in their fields by 2006.

**Strategy Vb1.** Provide employee training and development opportunities (detail assignments, training and education opportunities) and communicate via website/Intranet.

**Strategy Vb2.** Provide opportunities for staff to maintain scientific currency and expertise.

**Strategy Vb3.** Institute a program for employee recognition and rewards for innovative and collaborative work.

**Objective Vc.** The Fire Ecology Program develops and participates in training to meet programmatic needs by 2006.

**Strategy Vc1.** Develop the Fire Ecology Program training curriculum.

**Strategy Vc2.** Ensure that fire ecology is integrated into the interagency fire management training curriculum.

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*~WFMP MISSION GOALS 2A AND 4A: Fire management practices help ensure that visitors safely enjoy and are satisfied with the availability, accessibility, diversity, and quality of park facilities, services, and appropriate recreational opportunities; Fire Management develops improved management practices, systems, and technologies to accomplish its mission~*

**Mission Goal VI. Communication – Ensure common understanding, acceptance, and support of the Fire Ecology Program.**

**Objective VIa.** The Fire Ecology Program staff develop and implement a plan to communicate clearly, consistently, and effectively with all internal and external audiences by 2006.

**Strategy VIa1.** Develop a communication strategy for exchanging information within the NPS Fire Ecology Program staff.

**Strategy VIa2.** Develop a communication strategy for exchanging fire ecology information within the National Park Service.

**Strategy VIa3.** Develop an external fire ecology program education and communication plan that focuses on other federal, state, and local agencies and cooperators (Non-Governmental Organizations (NGOs)), in conjunction with existing communications programs.

**Strategy VIa4.** Work with existing communications programs to develop an external fire ecology education and communication plan that focuses on the general public.

## 6 Long-Term Action Plan

This section contains all the Fire Ecology Program mission goals, objectives, strategies, and action items in a table format. For a condensed text version (without the more specific action items), see section 5. *Strategies and action items with asterisks were identified as the highest priority tasks and were compiled into the 2004 Action Plan (separate document).*

### Mission Goal I. Fire Ecology Program Structure and Function – Integrate the Fire Ecology Program with the larger fire management community by clearly defining the Fire Ecology Program structure and function.

Action Required	By Whom	By When
<b>Objective Ia.</b> The role and organizational structure of the Fire Ecology Program is well-defined, understood, and recognized within the National Park Service (NPS) Fire Management Program by 2006.		
<b>*Strategy Ia1.</b> Develop organization and functional charts for the Fire Ecology Program and other relevant positions (e.g. Fire Management Officers (FMO), Prescribed Fire Specialists) and establish relationships of program specialists with the Regional and National office staffs.		
<b>*(a)</b> Develop an organization chart showing supervisory and functional relationships for National and Regional Office Fire Ecology Program staff and post to Intranet.	*Benson	defer (detailee if time)
<b>*(b)</b> Develop an organization chart showing supervisory and functional relationships for Regional Offices' and Parks/Clusters' Fire Ecology Program staff and post to Intranet.	*Kerr Regional Fire Ecology Program Managers (RFEPs)	defer (detailee if time)
<b>*Strategy Ia2.</b> Define the roles and responsibilities of the Fire Ecology Program staff.		
<b>*(a)</b> Develop a chart demonstrating positions and recommended duties within the Fire Ecology Program and post to Intranet.	*detailee to be determined	1 Oct 2004
<b>*(b)</b> Develop role and function statements identifying expectations and workload priorities for each type of Fire Ecology Program position and post to Intranet.	*detailee to be determined	1 Oct 2004
<b>Strategy Ia3.</b> Define roles and responsibilities of the Fire Ecology Program staff in relation to other NPS fire management staff.		
<b>(a)</b> Develop a table demonstrating positions and recommended shared duties and relationships between Fire Ecology Program and related positions (e.g. Fire Use Monitors, Fire Geographic Information System (GIS) Specialists, Fuels Positions, etc.) and post to Intranet.		
<b>(b)</b> Develop narrative to support the above table specifying critical interaction processes and recommended timeframes (e.g. Budget requests, field season scheduling, National Fire Plan Operations and Reporting System (NFORS) inputs)		
<b>(c)</b> Develop PowerPoint presentation and white paper that describes the role and functions of fire ecologists, and the role of fire ecologists in the fire management program.		
<b>(d)</b> Maintain working relationship with the FirePro Steering Committee (FPSC) by having a member on the Fire Ecology Steering Committee (FESC) who facilitates communication regarding staffing and other issues.	Noble	Completed Ongoing
<b>(e)</b> Select liaison between Fire Ecology Program and Fire Program Analysis (FPA) system development [links to action items IIc1(h) and IVb2(h)].	*Benson	Completed
<b>*Strategy Ia4.</b> Refine NPS Fire Monitoring Policy and specify the roles of Fire Ecology Program staff in policy implementation.		
<b>*(a)</b> Review Reference Manual 18 (RM-18) Chapter 11, Wildland and Prescribed Fire Monitoring, including additions of reporting, fuels monitoring/wildland-urban interface (WUI), adaptive management, and program reviews, and submit recommended edits for approval. Include defining the scope of the program and roles and responsibilities discussion [links to action items Ib1(b), Ic1(a), and IIa1(a)].	*Noble (task group)	1 Sep 2004
<b>*(b)</b> Ensure consistency between RM-18 Chapter 11, Wildland and Prescribed Fire Monitoring, and Chapter 4, Fire Management Plans [links to action item IVa1(a)].	*Noble	1 Sep 2004

## NPS Fire Ecology Program Strategic Plan

<b>Objective Ib.</b> The NPS Fire Ecology Program is well-integrated with the NPS Fire Management Program by 2006.		
<b>*Strategy Ib1.</b> Integrate the Fire Ecology Program and the NPS Fuels Management Program.		
<b>*(a)</b> Request Fire Ecology Program membership on national level committees that determine agency implementation plans for the National Fire Plan (NFP) <i>[links to action item IIa1(b)]</i> .	*Benson through Wallace	1 Jun 2004
<b>*(b)</b> Collaborate with fuels personnel to develop recommendations for Wildland Urban Interface Initiative (WUII) and mechanical treatment monitoring protocols; Communicate these protocols and recommended roles of fire ecologists in the fuels management planning, implementation, and evaluation and review processes, to fire management program staff through the Fire Management Program Center (FMPC) Fuels Management Specialist <i>[links to action item Ia4(a)]</i> .	*Wills (task group)	1 Oct 2004
<b>*(c)</b> Review RM-18 Chapter 10, Prescribed Fire, to ensure that fire ecologists will participate in developing projects, and submit recommended edits for approval.	*Wallner (task group)	1 Sep 2004
<b>Strategy Ib2.</b> Establish a relationship between the Fire Ecology Program and the NPS fire management safety program.		
<b>(a)</b> Identify which Fire Ecology Program activities are unique to the program and are not covered by existing fire management program Job Hazard Analysis (JHA).		
<b>(b)</b> Develop JHAs for each unique activity conducted by Fire Ecology Program staff and post to Intranet.		
<b>(c)</b> Provide copy of fire ecology-specific JHAs to National, Regional, and Park level safety program leaders.		
<b>(d)</b> Review RM-18 Chapter 3, Safety, and submit recommended edits for approval.		
<b>Strategy Ib3.</b> Integrate the Fire Ecology Program into the NPS fire evaluation and review process.		
<b>(a)</b> Review RM-18 Chapter 13, Evaluation and Review, including recommendation of regular Fire Ecology Program reviews at all levels including identification of emerging issues and submit recommended edits for approval <i>[links to Strategy Ic1 and action item IIa1(a)]</i> .		
<b>Strategy Ib4.</b> Establish the relationship between the Fire Ecology Program and the NPS Fire Prevention and Education Program.		
<b>(a)</b> Review RM-18 Chapter 8, Prevention and Fire Education, and submit recommended edits for approval.		
<b>Strategy Ib5.</b> Establish the relationship between the Fire Ecology Program and the NPS fire management Air Quality Program.		
<b>Strategy Ib6.</b> Establish the relationship between the Fire Ecology Program and the NPS Fire Use and Suppression Programs.		
<b>(a)</b> Review RM-18 Chapter 14, Air Quality and Smoke Management, and submit recommended edits for approval.		
<b>Strategy Ib7.</b> Establish fire ecologists as one of the fire program contacts for Burned Area Emergency Rehabilitation (BAER).		
<b>(a)</b> Contact BAER program coordinator to clarify fire ecology contacts and recommended procedures.		
<b>(b)</b> Review BAER process to improve coordination with the Resource Management Program.		
<b>(c)</b> Recommend that Regional FEPMs attend national interagency BAER workshops.		
<b>(d)</b> Review RM-18 Chapter 12, Burned Area Emergency Rehabilitation, and edit as necessary to establish fire ecologists as primary contacts for BAER.		
<b>Strategy Ib8.</b> Establish fire ecologists as one of the fire program contacts for the Resource Advisor (READ) function.		
<b>(a)</b> Review the role of Resource Advisor and make recommendations for changes to related policy and training and qualification practices.		
<b>(b)</b> Recommend that Park and Regional level fire ecologists serve as Resource Advisors within their respective geographic areas.		
<b>Objective Ic.</b> The success of the Fire Ecology Program in achieving its mission is assured through program evaluation, beginning in 2003.		
<b>Strategy Ic1.</b> Conduct periodic reviews of NPS Fire Ecology Programs		
<b>(a)</b> Develop recommended goals, procedures and methods for National, Regional, and Park level fire ecology program reviews that include external specialists <i>[links to action items Ia4(a), Ib3(a), and IIa1(a)]</i> .		
<b>(b)</b> Develop a schedule for implementation of program reviews and carry out the reviews.	Benson RFEPMs	
<b>*Strategy Ic2.</b> Evaluate progress on Strategic Plan implementation on a regular basis.		
<b>*(a)</b> Create an annual Action Plan identifying priority action items that need to be accomplished each year, personnel responsible, and timeframes.	*Keifer Fire Ecology Steering Committee (FESC)	Annually
<b>*(b)</b> Determine appropriate format/mechanism for Strategic Plan maintenance and post the Strategic Plan and current Action Plan to the Intranet.	*Keifer	Annually

## NPS Fire Ecology Program Strategic Plan

<b>* (c)</b> Update the Action Plan at least quarterly to reflect accomplishments and assignment or due date changes and post updates to Intranet.	*RFEPMs Conference Call Leader	Quarterly Jan, Apr, Jul, Oct
<b>* (d)</b> Review the Strategic Plan annually at the Fire Ecology Steering Committee meeting to revise and update the content as necessary and post updates to Intranet.	*Benson	Annually by 31 Oct
<b>* (e)</b> Include a brief Strategic Plan progress update and reminders of upcoming due dates as a regular agenda item on each Regional Fire Ecologists monthly conference call.	*RFEPMs Conference Call Leader	Monthly
<b>*Strategy Ic3.</b> Evaluate the Fire Ecology Program structure and position needs.		
<b>* (a)</b> Provide annual fire ecology cluster definition updates (per Business Rules for Fire Ecology Program Staffing, section F4) to National Fire Ecology Program Manager (NFEPM) and make budgetary recommendations to pass on to FMPC/Fire Management Leadership Board (FMLB).	*Benson RFEPMs	Annually by 31 Mar
<b>* (b)</b> Annually provide details of actual staffing for past fiscal year (per Business Rules for Fire Ecology Program Staffing, reporting rules section) to NFEPM to pass on to FMPC.	RFEPMs	Annually by 31 Dec
<b>(c)</b> Solicit feedback from Parks/Clusters to determine if their needs are met by current Fire Ecology Program staffing and provide written recommendations to NFEPM for reporting to the FirePro Steering Committee.	*Benson RFEPMs	
<b>(d)</b> Based on feedback from above (action item Ia3(a)), evaluate FirePro fire ecology logic results to determine if Fire Ecology Program needs are met.	*Benson RFEPMs	
<b>(e)</b> Prioritize position deficiencies generated by the FirePro logic and identify and prioritize additional positions not generated by the logic.	*Benson RFEPMs	Annually
<b>(f)</b> Develop, distribute, and summarize results of internal survey to determine how supervisory flow and organizational structure is working and report to FMLB.	*Benson RFEPMs	
<b>Objective Id.</b> The NPS Fire Ecology Program Strategic Plan is well-integrated with other strategic planning efforts by 2004.		
<b>*Strategy Id1.</b> The Fire Ecology Program Strategic Plan is integrated into the NPS Wildland Fire Management Strategic Plan and links to the NPS Strategic Plan.		
<b>* (a)</b> Review other strategic plans at all levels and functional areas within the National Park Service to determine relationships with the Fire Ecology Program.	*Keifer	Completed
<b>* (b)</b> Integrate the Fire Ecology Program Strategic Plan into the FMPC Wildland Fire Management Strategic Plan either as an appendix or other method.	*Keifer	1 Feb 2004
<b>* (c)</b> Provide references to the appropriate sections of the NPS Strategic Plan within the Fire Ecology Program Strategic Plan.	*Keifer	Completed
<b>Objective Ie.</b> The role of the Fire Ecology Program in relation to the broader external and interagency fire management community is well defined and recognized by 2008.		
<b>Strategy Ie1.</b> Define external users of fire ecology information.		
<b>Strategy Ie2.</b> Develop new Memorandum of Understandings (MOUs) and/or formalize relationships with identified partners that specify roles and responsibilities.		
<b>Strategy Ie3.</b> Identify and participate with appropriate interagency task groups as necessary to establish and maintain collaborative relationships with the broader fire management community.		

**Mission Goal II. Science-based Management – Ensure fire management activities are informed and supported by the best available scientific information.**

Action Required	By Whom	By When
<b>Objective IIa.</b> Field-level planning, reporting, and monitoring activities are developed and reviewed to ensure that they are science based by 2006.		
<b>*Strategy IIa1.</b> Develop recommended guidelines and procedures for review of policy, Fire Management and Monitoring Plans, research proposals, and reports.		
<b>*(a)</b> Define procedures for internal park, regional, and national review processes that utilize the adaptive management model concept to evaluate programs, identify needs or issues, and report results and recommendations <i>[links to Strategy Ic1 and action items Ia4(a), Ib3(a), and IIb2(b)]</i> .	*DeCoster (task group)	defer
<b>*(b)</b> Work with FMPC, through Regional Fire Management Officers (RFMOs), to ensure Fire Ecology Program consultation in policy development by identifying and soliciting representation on key national working groups <i>[links to action item Ib1(a)]</i> .	*Benson through NFSEPL	defer
<b>*(c)</b> Develop a list of both agency and academic/scientific community technical reviewers available to formally review policy, proposals, and reports and post the list to Intranet.	*Benson with NFSEPL	defer
<b>*(d)</b> Develop a voluntary internal peer review process for both formal and informal reports.		defer
<b>*(e)</b> Secure source for statistical consultation to assist park staff with scientific analyses.	*Benson	Completed
<b>*Strategy IIa2.</b> Develop, implement and review monitoring methods and protocols that effectively measure progress towards fire and resource management goals.		
<b>*(a)</b> Track monitoring plan development and implementation for park fire management programs.	*Allen RFEPs	Annually by 1 Oct
<b>*(b)</b> Define the process for evaluating and reporting the success of monitoring protocols in assessing the effectiveness and effects of fuels treatments <i>[links to action item Ia4(a)]</i> .	*DeCoster (task group)	defer
<b>*(c)</b> Implement the process defined above to evaluate the adequacy and effectiveness of existing approved monitoring protocols and report to FESC for recommendation.	* DeCoster RFEPs	Annually by 1 Oct
<b>*(d)</b> Identify programmatic areas where protocol inadequacies or weaknesses exist and prioritize development needs.	* DeCoster (task group)	defer
<b>*(e)</b> Host monitoring workshop(s) to facilitate refinement and sharing of existing protocols and/or development of new protocols where appropriate.		defer
<b>*(f)</b> Revise guidelines on selection and approval of alternative monitoring methods <i>[links to action item Ia4(a)]</i> .	*Benson	defer
<b>Objective IIb.</b> Knowledge gained through Fire Ecology Program activities is consistently analyzed, evaluated, and made available for program planning and refinement by 2005.		
<b>*Strategy IIb1.</b> Develop a structured reporting process for monitoring program data analysis and results that reports accomplishments to Park Superintendents, Regional Fire Management Officers, the Fire Management Leadership Board, and the public.		
<b>*(a)</b> Define annual reporting process for national-level monitoring efforts.	*Benson, RFEPs	1 Oct 2004
<b>*(b)</b> Define annual reporting process for regional-level monitoring efforts.	*Noble, RFEPs	1 Oct 2004
<b>*(c)</b> Define annual reporting process for park-level monitoring efforts.	*Thorstenson, DeCoster	1 Oct 2004
<b>*(d)</b> Designate and support selected parks for more detailed analysis and interpretation of park data sets.	*Benson, RFEPs	1 Oct 2004
<b>*(e)</b> Complete success stories on applications of monitoring program data and post to Intranet.	*Keifer, RFEPs	1 Oct 2004
<b>*(f)</b> Publish example applications of various analysis techniques and results (e.g. trend analysis, meta-analysis).	Various (e.g. Kopper/Peterson)	1 Oct 2004
<b>Strategy IIb2.</b> Develop a process to incorporate research results into fire management program planning and implementation.		
<b>(a)</b> Complete an annual publication on NPS Fire Ecology Program current research and research results that will inform the NPS Fire Management Program <i>[links to Strategy IIc1]</i> .	National Research task group	Annually
<b>(b)</b> Ensure feedback of information from new research is part of the adaptive management process <i>[links to action item IIa1(a)]</i> .		
<b>Objective IIc.</b> Landscape-level planning incorporating ecological modeling, desired future conditions, risk assessment, and treatment priority concepts is implemented by 2006.		
<b>*Strategy IIc1.</b> Work with NPS and interagency partners to develop and implement landscape-scale planning efforts, including LANDFIRE, the Fire Program Analysis (FPA) system, and the Fire Learning Network (FLN) program.		
<b>*(a)</b> Review tools currently available to assist with landscape-scale planning and post to Intranet.	*Wills (task group)	1 Sep 2004
<b>*(b)</b> Compile examples of landscape-scale planning efforts (risk assessments, landscape treatment priority analyses, existing ecological models) and post to Intranet.	*Wills	1 Sep 2004



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Action Required	By Whom	By When
<b>*(c)</b> Compile a list of technical experts who are willing to provide assistance in landscape-scale planning and post to Intranet.	*Wills	1 Sep 2004
<b>*(d)</b> Determine data needs for landscape-scale planning efforts.	*Wills (task group)	1 Sep 2004
<b>*(e)</b> Provide NPS representation to coordinate with The Nature Conservancy's (TNC) Fire Learning Network (FLN) Program to explore possibilities for collaboration at national, regional, and local levels.	*DeCoster, Wills	1 Oct 2004
<b>*(f)</b> Develop and implement landscape-scale planning workshops to include ecological modeling and development of desired future conditions <i>[links to Strategy IVa3]</i> .		defer
<b>*(g)</b> Work with Fire Program Analysis (FPA) system NPS representative to coordinate landscape-level planning efforts on an interagency basis <i>[links to action item IVa2(j)]</i> .	*Benson	1 Sep 2004
<b>*(h)</b> Encourage integration of ecological modeling concepts, desired future condition development, and adaptive management in existing National Wildfire Coordinating Group (NWCG) fire ecology training curriculum (e.g. RX-310, RX-510, M-580).	*Noble	1 Feb 2004
<b>*(i)</b> Continue to support field validation of burn severity assessment data.	*Benson	1 Sep 2004
<b>*(j)</b> Initiate development of burn severity applications workshop and conduct trial workshop.	*Benson, Burn Severity Mapping working group	1 Sep 2004
<b>*(k)</b> Coordinate with LANDFIRE efforts to ensure that NPS needs are represented and NPS data and information is made available where possible.	*Benson	1 Oct 2004
<b>*Strategy IIc2.</b> Utilize a consistent/relevant process to document Fire Regime Condition Class (FRCC) and integrate FRCC assessments into ecological models and other planning efforts.		
<b>*(a)</b> Work with Fuels/Fire-GIS personnel to define NPS Fire management program roles, responsibilities, and procedures with regard to FRCC classification and documentation.	*Benson, Bahr, Wallace	1 Oct 2004
<b>*(b)</b> Ensure Regional & Park fire ecology staff are informed of FRCC procedure information and attend FRCC training.	*NPS FRCC rep	1 Sep 2004
<b>*(c)</b> Evaluate existing standard FRCC methods and alternative protocols as they develop.	*Allen, Reeberg	1 Oct 2004
<b>*(d)</b> Post to Intranet examples of existing FRCC development processes utilized in various parks and regions.	*Schon	1 May 2004
<b>*(e)</b> Ensure that FRCC assessments are incorporated into the Natural Resource Program Center (NRPC) Watershed Assessment Program <i>[links to Strategy IVa3]</i> .	*Eckert, Benson	1 Oct 2004
<b>Objective IId.</b> A process for identifying, prioritizing, and pursuing Fire Ecology Program research needs is implemented by 2006.		
<b>Strategy IId1.</b> Identify National Fire Ecology Program roles, mechanisms, and schedules for identifying, prioritizing, and pursuing programmatic research needs.		
<b>(a)</b> Review RM-18 Chapter 15, Research, and submit recommended edits for approval.		
<b>(b)</b> Establish a National Fire Ecology Program research task group whose membership is responsible for providing research program oversight.	FESC	
<b>(c)</b> Compile and maintain a list of fire ecology research needs and post to Intra and Internet.	Research task group	
<b>(d)</b> Clarify annual FirePro research request process including development /communication of submittal, review and approval processes.	Research task group	
<b>(e)</b> Compile a list of appropriate available fire research funding sources (such as Joint Fire Science Program (JFSP)) and associated timeframes. Communicate list through e-mail and development and maintenance of an Intranet website.	Research task group	
<b>(f)</b> Conduct annual meeting/conference call of research task group to complete a review of regional and national priorities for research and to develop recommendations for prioritization and forwarding of proposals.		
<b>Strategy IId2.</b> Identify regional and Park level Fire Ecology Program roles, mechanisms, and schedules for identifying, prioritizing, and pursuing programmatic research needs.		
<b>(a)</b> Establish regional multi-disciplinary research committees structured according to local need (may be multi-agency). Solicit regional committee membership, Select committee chairs, develop committee charter, and schedule regional review process.	RFEPMs	
<b>(b)</b> Develop unified call within each landscape/ecosystem for formalized questions/statements identifying functional areas of research need.	Regional Research Committee	
<b>(c)</b> Coordinate with National Research Task Group to establish procedures and timelines for prioritization of research needs among all regions.		
<b>(d)</b> Host proposal writing workshop (coordinate with Natural Resource Program workshop).	Nat'l task group	

**Mission Goal III. Information Management – Provide fire ecology-related data and information that is easily accessible and valuable to all user groups.**

Action Required	By Whom	By When
<b>Objective IIIa.</b> Data needs for the Fire Ecology Program are identified, prioritized, and pursued by 2006.		
<b>Strategy IIIa1.</b> Identify, prioritize, and acquire data required to support the Fire Ecology Program.		
(a) Inventory currently available data sets that are part of the Fire Ecology Program.		
(b) Conduct a survey of fire ecology and fire management staff to determine relevant data sets needed for Fire Ecology Program inventory, monitoring, modeling, and planning efforts and create a prioritized list of programmatic data needs.		
(c) Develop a process and secure funding to support collection of identified high priority inventory data not currently available.		
(d) Develop process/training to assist parks with data mining and data layer development.		
<b>Strategy IIIa2.</b> Establish the relationship between the Fire Ecology Program and the NPS fire information management program.		
(a) Review RM-18 Chapter 16, Information Management, and submit recommended edits for approval.		
(b) Write data management plan for fire ecology data to include identifying data management responsibilities using NPS Inventory and Monitoring (I&M) Program data management plan as starting point <i>[links to action item IVb2(d)]</i> .		
<b>Objective IIIb.</b> Fire ecology data and information are collected, stored, and accessed using the latest technologies for use by the Fire Ecology and other related programs and projects by 2005.		
<b>*Strategy IIIb1.</b> Design and build an application to collect, store, index, and analyze fire ecology data and information.		
*(a) Develop the Fire Ecology Assessment Tool (FEAT) to meet the data and information needs of the Fire Ecology Program.	*Benson	1 Sep 2004
*(b) Develop an overall FEAT Management Plan identifying working groups, roles and responsibilities, communication methods, and timelines for FEAT.	*Noble	Completed
*(c) Provide strategic guidance for the ongoing development, implementation, and maintenance of FEAT.	*Benson, Delaney, RFEPs	1 Oct 2004
*(d) Test the FEAT application and provide timely feedback to the developer to improve the functionality and ensure the usefulness of the application.	*Benson (task group)	1 Sep 2004
*(e) Conduct a field assessment of current data conditions to determine the workload for the migration of legacy data.	*Benson	1 Jan 2004
*(f) Develop and implement a plan for the migration of legacy data (Fire Monitoring Handbook (FMH)) to FEAT so that these data can be easily accessed and analyzed.	*Keifer, Benson, Reeberg, Kopper, Kerr, DeCoster, McInness, Gorman	1 Apr 2004
*(g) Develop and maintain a protocols catalog for FEAT to encourage sharing protocols where possible to minimize duplication of effort in protocol development.	*Benson, RFEPs	1 Oct 2004
*(h) Develop recommended standards for collecting fire weather, fire behavior, and smoke data and incorporate this data into FEAT.	*Burgard (task group)	1 Oct 2004
*(i) Manage the FEAT contracts to ensure that project timelines and specifications are met.	*Delaney, Benson	Ongoing
*(j) Provide oversight and maintenance of the FEAT implementation process ( <i>Note: This strategy was merged with strategy IIIb1c</i> ).	See strategy IIIb1c	1 Oct 2004
*(k) Develop an ecological 'disturbance' database in FEAT.	*Reeberg, Mike Story	defer
*(l) Continue to archive burn severity spatial data on Earth Resources Observation Systems (EROS) data center server and maintain access to data through National Burn Severity Mapping Project website.	*Benson	1 Sep 2004
*(m) Migrate Composite Burn Index (CBI) data to standard format and determine location to store data and make accessible through the Internet.	*Benson, Burn Severity Mapping working group	1 Sep 2004
<b>Strategy IIIb2.</b> Centralize data and information as appropriate to provide secure access.		
(a) Develop a website or Fire Transfer Protocol (FTP) site with searchable database to catalogue fire ecology related tools, information, and resources (e.g. bibliographies, databases, models) using existing processes where available.		
(b) Identify appropriate hosting organizations for data repositories. (e.g., USGS-GeoMac for fire history, I&M for monitoring data) and contact them to explore possibilities for hosting data.		
(c) Develop mechanism for contract data management support; develop program to use Cooperative Ecosystem Studies Units (CESUs).		

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Action Required	By Whom	By When
(d) Determine location and process for populating a digital library of existing fire management and fire monitoring plans for each park unit or cluster.		
(e) Develop links to the digital library from the Fire Ecology Intranet and Internet sites, working with the NPS Fire Management Program.	Benson, Web master	
(f) Create an internal database of fire ecology program employees and their specific areas of expertise and post to Intranet.	RFEPMs and Field Fire Ecologists	
<b>Strategy IIIb3.</b> Develop and implement standards and quality assurance/quality control (QA/QC) measures to ensure consistent, high quality data and information.		
(a) Work with NPS fire information management staff to develop data standards for fire ecology-related data.	data standards task group	
(b) Develop QA/QC procedures for fire ecology data, in coordination with the I&M program and other collaborators, following guidelines being developed in the Director's Order on Data Quality (DO-11B).	data standards task group	

**Mission Goal IV. Integrate Fire and Resource Management – Facilitate coordination between the fire and resource management programs to ensure that the fire program meets resource management goals.**

Action Required	By Whom	By When
<b>Objective IVa.</b> Fire and resource management staff will work together to ensure that fire-related resource management objectives are integrated in all levels of park planning by 2007 (General Management Plan (GMP), Resource Management Plan (RMP), Fire Management Plan (FMP), project-level plan); develop policy, guidance and new initiatives for fire-related land management planning and related issues.		
<b>Strategy IVa1.</b> Establish the role of the Fire Ecology Program in the fire and resource management planning process.		
(a) Review RM-18 Chapter 4, Fire Management Plans, and edit as necessary to establish fire ecologists as leaders on specific portions of the Fire Management Plan, including recommending that collaboration should occur with resources management on FMP compliance <i>[links to action item Ia4(b)]</i> .		
(b) Involve fire ecologists directly in natural/cultural resource issues relating to fire for RMPs, GMPs, ensuring that critical resource management issues relating to fire are addressed in the plans; establish contacts between fire ecologists and natural/cultural resource managers.		
<b>Strategy IVa2.</b> Establish NPS administrative processes that encourage collaboration between the Fire Ecology Program and natural and cultural resource planning efforts.		
(a) Position fire ecologist at NRPC.	*Sexton	Completed
(b) Identify partnership goals between FMPC and NRPC.	*Benson	Ongoing
(c) Identify key positions at all levels (unit, region, national) linking fire & resource management programs and define their roles and responsibilities <i>[links to Strategies Ia2 and Ia3]</i> .		
(d) Define positions and recommended shared duties and relationships between fire ecology program and NRPC related positions (e.g. I&M, Biological Resource Management Division (BRMD), Natural Resource Stewardship and Science (NRSS), etc.) and post to Intranet <i>[links to Strategy Ia2]</i> .	*Benson	
(e) Conduct field assessments at parks jointly with fire and natural resource (including NRPC) staff.		
(f) Develop position paper assessing the benefits of synchronizing FirePro and resource management budget/funding calls.	(NRSS)	
(g) Post schedule of budget/funding calls on fire and resources Intranet sites.	Benson (BRMD)	
(h) Write position paper assessing the effectiveness of fire management as a part of the NRSS Directorate versus the current structure.		
(i) Ensure that FMPC is represented on NRPC Fire Technical Advisory Group (FTAG).		Completed
* <b>(j)</b> Work with Fire Program Analysis (FPA) system staff to ensure FPA incorporates natural and cultural resource management information and ecological concepts <i>[links to action item IIc1(g)]</i> .	*Allen (task group) Manley	1 Sep 2004
* <b>(k)</b> Designate a fire ecologist to serve on each of the 16 NPS Exotic Plant Management Team (EPMT) steering committees.	*Eckert RFEPMS	1 Feb 2004
<b>Strategy IVa3.</b> Educate and train fire and resource staff on appropriate collaborative issues including planning, FRCC, and ecological modeling, working with other fire management program staff.		
(a) Develop “Integrated Fire and Resource Management Planning” workshops for regions/ecoregions <i>[links to action item IIc1(f)]</i> .	Resource Specialists, RFEPMS, Field Fire Ecologists	
(b) Conduct “Integrated Fire and Resource Management Planning” workshops for regions/ecoregions <i>[links to action item IIc1(f)]</i> .		
(c) Refine “Integrated Fire and Resource Management Planning” workshops for regions/ecoregions <i>[links to action item IIc1(f)]</i> .		
<b>Objective IVb.</b> The Fire Ecology Program will collaborate with the Inventory and Monitoring (I&M) program (branch of the NPS Natural Resource Program Center) by 2006 to efficiently meet resource-monitoring goals.		
<b>Strategy IVb1.</b> Continue to implement collaborative vegetation/fuels mapping program with the NPS I&M program.		
* <b>(a)</b> Develop vegetation and fuels mapping priorities at both regional and national levels, working with other fire and resource management staff.	*Benson, RFEPMS	defer until Ft. Collins position is filled

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Action Required	By Whom	By When
<b>*(b)</b> Formalize vegetation and fuels mapping development needs assessment process.	*Benson, RFEPMs	defer
<b>*(c)</b> Establish fire ecologists as one of the fire program contacts for vegetation and fuels mapping to ensure vegetation maps are meeting fire management needs.	*Benson	defer
<b>*(d)</b> Develop guidelines and tools for updating vegetation and fuels data layers.	*Benson, RFEPMs	defer
<b>*Strategy IVb2.</b> Integrate the Fire Ecology Program and I&M network inventory and monitoring efforts.		
<b>*(a)</b> Establish fire ecologists as the primary contact for collaboration with I&M networks by providing contact information to fire program and I&M network staff and posting to Intranet.	*Keifer, RFEPMs	defer
<b>*(b)</b> Encourage fire ecologist participation in I&M workshops to ensure that fire ecosystem models are incorporated in I&M conceptual ecosystem models <i>[links to action item IIc1(f)]</i> .	*Fancy, RFEPMs	defer Ongoing
<b>*(c)</b> Explore the potential to pool resources with the I&M program in collaborative monitoring efforts (e.g. invasive species monitoring work group, combining field crews, etc.).	*Fancy, *Benson, RFEPMs	Ongoing
<b>*(d)</b> Develop a work plan to integrate fire effects data with I&M program databases <i>[links to action item IIIa2(b)]</i> .	*Benson, Fancy	defer
<b>*(e)</b> Facilitate sharing monitoring protocols by consulting and populating the I&M protocol database.	*DeCoster (task group)	defer
<b>*(f)</b> Host regional workshops to facilitate integrated analysis of fire monitoring and I&M data sets.	?	defer
<b>*(g)</b> Integrate the burn severity mapping program with the I&M program.	*Benson	defer Ongoing
<b>Strategy IVb3.</b> Participate with appropriate task groups to ensure collaboration occurs between fire ecology and I&M programs and staff.		
<b>(a)</b> Ensure that NRPC is represented on Fire Ecology Steering Committee.	Benson	Completed
<b>(b)</b> Coordinate with I&M and identify and pursue potential partners outside the agency.		
<b>(c)</b> NRPC and FMPC will notify each other of task groups or initiatives as established to ensure coordination and to identify opportunities for collaboration.	Benson	

**Mission Goal V. Employee Development and Retention – Promote a work environment where employees are highly skilled and valued.**

Action Required	By Whom	By When
<b>Objective Va.</b> The Fire Ecology Program recruits and maintains a professional and highly competent work force by 2006.		
<b>Strategy Va1.</b> Institute recruitment plan for filling vacant fire ecologist and fire effects monitor positions to recruit employees with high potential.		
(a) Develop example template for recruitment plan for fire ecology program positions and post to Intranet.	Personnelist Field Ecologist	
(d) Post example recruitment plans to NPS Fire Ecology website.	Benson	
(c) In recruitment plans, encourage parks to advertise fire ecologist positions as upward mobility GS 9/11 (entry level position could be 401 and full performance would be 408 series) where appropriate.		
(d) Assess success of recruitment plan efforts through annual reviews and report results in annual regional reports.	RFEPMs	Annually
(e) Encourage use of technical experts on selection panels for fire ecology program position hiring.		
<b>Strategy Va2.</b> Develop standard position descriptions (PDs) for all levels of the Fire Ecology Program. Include additional optional PDs that incorporate 6c coverage (secondary firefighter retirement) for Fire Ecology Program positions where appropriate.		
(a) Collaborate with human resource staff and RFMOs to assess the potential to revise the current Lead Monitor benchmark PD to include supervisory responsibility and to create an additional Lead Monitor benchmark PD that includes secondary 6c coverage for optional use.	PacWest FE Regional staff	
(b) Collaborate with human resource staff and RFMOs to assess the potential to create an additional fire ecologist benchmark PD that includes secondary 6c coverage for optional use.	Midwest FE Regional staff	
(c) Collaborate with human resource staff and RFMOs to assess the potential to create additional Assistant Lead Monitor and Fire Effects Crew benchmark PDs that include secondary 6c coverage for optional use.	IMRO Regional FE staff	
(d) Encourage the use of benchmark PDs for all new Fire Ecology Program hires by posting the benchmark PDs on the Intranet and considering inserting language to encourage their use in RM-18 Chapter 11, Wildland and Prescribed Fire Monitoring.	Benson	
<b>Strategy Va3.</b> Develop and implement minimum competencies and professional standards for all permanent Fire Ecology Program employees, including scientific and program administration skills.		
(a) Form Task Group to develop competencies and professional standards (look at recently developed Bureau of Land Management (BLM) example).		
(b) Conduct scoping of FESC to determine desired minimum competencies.		
(c) Create minimum competencies for fire ecologists, lead monitors, and fire effects crew member positions, including science-based skills as well as skills needed for program administration.		
(d) Create professional standards for Fire Ecology Program positions.		
(e) Competencies disseminated to fire ecology community through emails and posted on Intranet.	Benson	
(f) Provide necessary training so that all fire ecologists will meet professional ecologist 408 series X-118 standards by September 2004 (or within two years of hire). Training plans will outline needs to achieve 408 series and define methods to achieve this.	Benson RFEPMs First Line Supervisors	Recurring
<b>Strategy Va4.</b> Implement a process for tracking retention of employees.		
(a) Create exit interview questionnaire and template for reporting regional staffing statistics in annual staffing report.		
(b) Analyze exit interview questionnaires to determine number of employees who have left the program and identify potential emerging trends or issues needing to be addressed.	RFEPMs	Recurring
(c) Results of exit interview form analysis will be made available to NFEPM during regular staffing reporting process.	RFEPMs	Recurring Annually
(d) Exit interview and regional staffing and retention rates summary statistic information will be compiled and included as part of regional annual staffing report.	Benson	

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Action Required	By Whom	By When
<b>Objective Vb.</b> The Fire Ecology Program develops highly skilled, dedicated, and motivated employees who are leaders in their fields by 2006.		
<b>Strategy Vb1.</b> Provide employee training and development opportunities (detail assignments, training and education opportunities) and communicate via website/Intranet.		
(a) Recommend RM-18 Chapter 6, Training, Qualifications, and Certification, and Chapter 11, Wildland and Prescribed Fire Monitoring, edits to explicitly include employee development plans.		
(b) Develop website link on fire ecology Intranet to NPS training site and example employee development plans.		
(c) Reference internal program structure survey (action item Ic3(f)) to assess program career ladder. Identify any programmatic deficiencies and propose solutions.	Benson	
(d) Ensure employees are informed of the mentoring program and support their participation.	National Fire Mentoring Program manager	Recurring Annually (fall)
(e) Provide educational opportunities to enhance skills of ecologists.		
<b>Strategy Vb2.</b> Provide opportunities for staff to maintain scientific currency and expertise.		
(a) Standardize fire ecologist performance plans to include maintaining scientific currency in the field of fire ecology.		
(b) Assess Fire Ecology Program staff development needs by completing and implementing Employee Development Plans.		
(c) Facilitate funding for access to scientific publication and education and professional society membership.		
(d) Facilitate funding for participation in appropriate professional workshops, scientific meetings and conferences [links to action item VIa2(c)].	Benson RFEPs	Ongoing
<b>Strategy Vb3.</b> Institute a program for employee recognition and rewards for innovative and collaborative work.		
(a) Develop criteria for rewards/nomination process and publicize program to Fire Ecology Program.		
(b) Publicize awards in Fire Ecology Newsletter, through mailing lists, and on Intranet.		Recurring
<b>Objective Vc.</b> The Fire Ecology Program develops and participates in training to meet programmatic needs by 2006.		
<b>Strategy Vc1.</b> Develop the Fire Ecology Program training curriculum.		
(a) Identify fire ecology training needs by establishing a Fire Ecology Program training task group, including a representative from natural resources management.	Training task group	
(b) Identify needs for existing course revisions and/or new course development.	Training task group	
*(c) Develop and implement statistics refresher, including training for commercially-available statistics software.	*Kerr, Benson, Gatewood, Miller	1 Jun 2004
*(d) Develop and implement FEAT training.	*Benson, FEAT Testing working group	1 Jul 2004
(e) Review RX-80 and RX-92 course content to determine needs for these courses.		
(f) Review RM-18 Chapter 6, Training, Qualifications, and Certification, and submit recommended edits for approval.		
(g) Develop and implement CBI training.		
(h) Develop and implement NBR data analysis workshop.		
<b>Strategy Vc2.</b> Ensure that fire ecology is integrated into the interagency fire management training curriculum.		
*(a) Request Fire Ecology Program membership/representation on National Wildfire Coordinating Group (NWCG) Fire Use Working Team.	*Noble through Dick Bahr	1 Nov 2003
(b) Ensure ecological issues are appropriately addressed in national interagency fire management training curriculum and identify interagency fire ecology training needs.	NWCG Fire Use Working Team rep	
(c) Ensure fire ecology related course offerings are listed on the Intranet.	Training task group	
(d) Fire Ecology Program staff participate as students, faculty, and steering committee members for both NPS and interagency courses.		

## Mission Goal VI. Communication – Ensure common understanding, acceptance, and support of the Fire Ecology Program.

Action Required	By Whom	By When
<b>Objective VIa.</b> The Fire Ecology Program staff develop and implement a plan to communicate clearly, consistently, and effectively with all internal and external audiences by 2006.		
<b>*Strategy VIa1.</b> Develop a communication strategy for distributing and exchanging information within the NPS Fire Ecology Program staff.		
<b>*(a)</b> Implement monthly conference calls for the Regional Fire Ecology Program Managers (RFEPM) and quarterly calls for the Fire Ecology Steering Committee.	Benson	Monthly
<b>*(b)</b> Include discussion board as part of Fire Ecology Program website.	?	defer
<b>*(c)</b> Conduct annual Fire Ecology Steering Committee meetings.	Benson	Annually
<b>*(d)</b> Conduct biennial meetings when possible for all NPS fire ecology staff (held in conjunction with science/technology updates) and continually evaluate the most efficient meeting timeframe and process.	Benson	Biennially
<b>*(e)</b> Publish and manage a NPS fire ecology newsletter and post to Intranet.	*Eric Miller, RFEPMs	Annually
<b>*(f)</b> Enhance, manage, and update the Fire Ecology Program Intranet and Internet websites (using I&M site as a model) <i>[links to action item VIa2(a)]</i> .	*Keifer	1 Sep 2004
<b>*(g)</b> Establish and maintain Lotus Notes mailing groups for FESC, RFEPMs, Field Ecologists, and Lead Monitors.	*DeCoster	Completed
<b>*Strategy VIa2.</b> Develop a communication strategy for exchanging fire ecology information within the National Park Service.		
<b>*(a)</b> Enhance, manage, and update Fire Ecology Program Internet and Intranet websites by establishing contacts and a process for maintaining the websites <i>[links to action item VIa1(f)]</i> .	*Keifer	1 Sep 2004
<b>*(b)</b> Develop an external communications plan for FEAT.	*Benson	defer
<b>*(c)</b> Encourage participation and presentations at scientific meetings and conferences (George Wright Society, regional Resource Management meetings) by sending out e-mail notification detailing meeting locations and dates and maintaining an updated list on the Intranet <i>[links to action item Vb2(d)]</i> .	*Keifer	1 Sep 2004
<b>*(d)</b> Communicate the Fire Ecology Strategic Plan to the National Park Service by posting the plan on the NPS Intranet site.	*Keifer	1 Sep 2004
<b>Strategy VIa3.</b> Develop an external fire ecology program education and communication plan that focuses on other federal, state, and local agencies and cooperators (Non-Governmental Organizations (NGOs)), in conjunction with existing communications programs.		
<b>(a)</b> Enhance, manage, update fire ecology Internet website (establishment of flow process, contacts).	*Benson RFEPMs	Ongoing
<b>(b)</b> Develop a comprehensive listing of fire ecologists in federal, state and local agencies, NGOs, universities and private consultants, and formalize a method of communicating fire ecology program information.	FESC	
<b>(c)</b> Designate an NPS liaison for the Fire Effects Monitoring and Inventory Protocol (FIREMON).	FESC	
<b>(d)</b> Write a communication plan to outline effective strategies to communicate fire ecology information to external audiences.		
<b>Strategy VIa4.</b> Work with existing communications programs to develop an external fire ecology education and communication plan that focuses on the general public.		
<b>(a)</b> Partner with Fire Information personnel to provide fire ecology information and review of existing ecology content in public fire education materials and presentations.		
<b>(b)</b> Establish a communication flow/process (for national, regional, local outreach to the public.		



## Appendix A – Program Background

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Historically, a significant portion of the Fire Ecology Program has involved fire effects monitoring data collection, storage and analysis. The Fire Monitoring Handbook (FMH) was largely a field-level effort to provide consistent guidance to the staff responsible for monitoring the effects of prescribed fire in National Parks. The FMH-associated database and analysis software served the needs of the program for over ten years, however, the DOS-based software does not serve all of the current and future information management needs of the expanding Fire Ecology and Fire Management Programs. The Fire Monitoring (now “Ecology”) Steering Committee recommended that the software be completely revised to meet the changing program needs. The NPS Fire Management Leadership Board (FMLB) approved and funded efforts to implement the recommendations of the Steering Committee in 2001.

The first step was to complete a Business Needs Analysis (BNA) to comprehensively identify the information management needs of the fire ecology program. This BNA collected fire ecology-related information needs from NPS Fire and Resource managers, cooperating agencies, and interested publics. The BNA identified information pieces and their relationships in a manner that allows software developers to design and construct an application for information management. An application, the Fire Ecology Assessment Tool (FEAT), has been designed, constructed, and the first version is currently being tested. The next phase of implementation of the application, as well as migration of legacy data, is in progress.

Recognizing that information management was only one element of the Fire Ecology Program, the Fire Ecology Strategic Plan (formerly known as the “Program Review”) was initiated simultaneously with the BNA and FEAT development to address overall program direction. Many new interagency initiatives have provided new guidance to fire management programs that require cooperation and collaboration at all levels. For example, the Fire Program Analysis (FPA) System, in the initial development stage, makes it clear that large-scale, geospatial fire ecology information will be critical input for this new planning and budget allocation system that will be used by all federal fire management agencies. The multi-departmental mandate to use Fire Regime Condition Class (FRCC) as a method for evaluating existing conditions on federal lands and tracking changes in these conditions (program accomplishments) is another such interagency initiative that requires involvement from the fire ecology community.

With a staff distributed across the entire country, the Fire Ecology Program was in need of a more organized effort to provide consistency in meeting the demands of the new initiatives as well as to combine efforts to increase productivity and exchange ideas. A Strategic Plan was clearly needed as both a communication tool to help articulate program goals and as a method to more efficiently implement the work needed to achieve the goals of NPS Fire Ecology and Fire Management Programs.

## Appendix B – Fire Ecology Strategic Plan Workshop Participants

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Jennifer Allen	Fire Ecologist, Alaska Regional Office
Craig Axtell <sup>1</sup>	Director, Biological Resources Division, Natural Resource Program Center
Nate Benson <sup>1</sup>	Fire Ecologist/Data Manager, Fire Management Program Center/Natural Resources Program Center
Brad Cella	Fire Management Officer, Alaska Regional Office
Dana Cohen	Fuels Technician, Great Smoky Mountains National Park
Gladys Crabtree	Fire Information Resource Manager, Fire Management Program Center
Jim DeCoster*	Fire Ecologist, Midwest Regional Office
Ed Delaney	Data Manager, Fire Management Program Center
Greg Eckert	Restoration Ecologist, Natural Resource Program Center
MaryBeth Keifer*	Fire Ecologist, Pacific West Regional Office
Linda Kerr	Fire Ecologist, Intermountain Regional Office
Dave Lentz <sup>1</sup>	Wildland Fire Management Specialist, Intermountain Regional Office
Caroline Noble*	Fire Ecologist, Southeast Regional Office
Noel Poe <sup>1</sup>	Superintendent, Theodore Roosevelt National Historic Park
Paul Reeberg	Fire Ecologist, Pacific West Regional Office
Tim Sexton	Fire Ecologist, Fire Management Program Center
Doug Wallner	Prescribed Fire Specialist, Northeast Regional Office
Robin Wills	Fire Ecologist, Pacific West Regional Office

<sup>1</sup> Attended one workshop only

\* Part of task group that refined the Strategic Plan following the workshops